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# salt-api

# Generic, modular network access system

```
commit eb78df5d092dbf69645a8018dd630b644685798f
Author: Thomas S Hatch <thatch45@gmail.com>
Date: Tue Sep 18 16:34:34 2012 -0700
  Initial commit
diff --git a/README.md b/README.md
new file mode 100644
index 0000000..f901767
--- /dev/null
+++ b/README.md
@@ -0.0 +1.4 @@
+salt-api
+=======
+Generic, modular network access system
\ No newline at end of file
```

#### **Parts**

- salt-api script & daemon.
- Netapi modules.
- Salt.
  - Python API.
  - Eauth.

## Netapi Modules

- Bind to a port.
- Start a service.

### Pre-reqs

• Salt's Python API. https://docs.saltstack.com/en/latest/ref/clients

#### \*Client Interfaces

- LocalClient.
- Caller.
- RunnerClient.
- WheelClient.
- CloudClient.
- SSHClient.
- NetapiClient.

Features comparison.

#### LocalClient

```
local = salt.client.LocalClient()
local.cmd('*', 'cmd.run', ['whoami'])
```

#### LocalClient.cmd()

```
cmd(
tgt,
fun,
arg=(),
timeout=None,
expr_form='glob',
ret=",
jid=",
kwarg=None,
**kwargs)
```

kwargs can include eauth credentials.

#### NetapiClient

- 1. Accept a low payload.
- 2. Is the master running?
- 3. Does the low data contain eauth credentials?
- 4. Which client should this low payload go to?
- 5. Instantiate that client and pass the low to the right method.

#### rest\_cherrypy

- Regular wsgi app.
- Can be run via:
  - salt-api daemon (managing the builtin CherryPy server).
  - Any other wsgi-capable web server.
- Since we now dep on Tornado, logical to switch to Saltnado.
  - Still a lot of work and testing to do.
  - No immediate plans or ongoing effort.
  - Async API should be in Salt-core.
  - https://github.com/saltstack/salt/issues/26505

#### rest\_cherrypy Features

- Written to drive a JavaScript SPA.
- Content-negotiation for requests and responses.
- Light wrapper around Salt's Python API.
- Can execute multiple Salt commands in a single request/response.
- Most operations can use a session token/cookie for convenience.
- Most endpoints are workflow conveniences.

#### rest\_cherrypy *Non*-Features

- rest\_cherrypy and salt-api do *not* enforce authentication or authorization.
- Requires Salt for all operations -- does not do anything in addition to Salt, by design.

# rest\_cherrypy Endpoints

- /
- /logout, /logout
- /minions
- /jobs
- /run
- /events
- /hook
- /keys
- /ws
- /stats

# Demo Time